UNITED STATES DISTRICT COURT FOR THE DISTRICT OF ARIZONA

United States of America,)	No.	CR-15-1723-TUC-RCC-DTF
Plaintiff,)	110.	ON 13 1723 100 NGC 311
VS.)		Tucson, Arizona April 5, 2018
Lonnie Ray Swartz,)		9:49 a.m.
Defendant.))		

BEFORE: THE HONORABLE RANER C. COLLINS, JUDGE

REPORTER'S EXCERPTED TRANSCRIPT OF PROCEEDINGS

JURY TRIAL
Day 11

(TESTIMONY OF EMMA LEW)

Official Court Reporter: Candy L. Potter, RMR, CRR Sandra Day O'Connor U.S. Courthouse, Suite 312 401 West Washington Street, Spc 36 Phoenix, Arizona 85003-2151 (602) 322-7246

Proceedings Reported by Stenographic Court Reporter Transcript Prepared by Computer-Aided Transcription

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09:50:41

-Emma Lew - Direct Examination -1 (The following excerpt is the testimony of Emma Lew.) 2 THE COURT: Let the record reflect the jury has 3 returned to the courtroom, the presence of all counsel and the defendant. 4 I apologize for the late start. My morning calendar 5 09:49:18 took a little bit longer than I anticipated it would take, so 6 7 I'm sorry about that. 8 But we're ready to get started now. 9 Dr. Lew, if you'll come back up on the witness stand, 10 please. 09:49:29 11 Miss Feldmeier, you may continue. 12 MS. FELDMEIER: Thank you, Your Honor. 13 DIRECT EXAMINATION 14 BY MS. FELDMEIER: Good morning, Dr. Lew. 15 Q. 09:50:11 16 A. Good morning. 17 Q. So now I'd like to pick up from yesterday with your analysis then of other evidence in the case, in addition to 18 19 the angles of the gunshot wounds that we have here in Exhibit No. 381. 20 09:50:29 2.1 A. Yes.

MS. FELDMEIER: And at this time, Your Honor, the Government moves the admission of Exhibit 381, which is the grey mannequin with the knitting needles inserted at the wound points.

22

23

24

25

09:51:45

-Emma Lew - Direct Examination -1 MR. CHAPMAN: I'm sorry, the mannequin? 2 MS. FELDMEIER: Yes, the mannequin, the display with 3 the knitting needles inserted. MR. CHAPMAN: I have no objection to it being used as 4 a demonstrative exhibit. 5 09:50:51 6 THE COURT: It's admitted as a demonstrative exhibit. 7 MS. FELDMEIER: Okay. 8 (Exhibit No. 381 admitted into evidence.) BY MS. FELDMETER: 9 10 So then what I'd like to do now is run through some of the 09:51:03 11 other evidence in this case. 12 Could you take a look at 231B and 232B, which are both photographs showing the heart. Is that correct? 13 14 A. Yes, that is correct. 15 Q. And you will note that there are black circles on those 09:51:17 16 photographs. And I will represent to you that Dr. Madrigal 17 placed those to indicate damage to the heart itself. Could you please examine -- let's start with 231B. 18 19 Yes. Α. 20 Do you see any damage on 231B? Q. 09:51:35 2.1 Yes, I do. Α. 22 Caused by a bullet, for example. Q. 23 Α. Yes. 24 Q. Okay. And where is that damage?

There's one definite round hole or defect above the heart.

25

- 1 It looks like it's in the pericardial sac, which surrounds the heart.
- Another area of damage is in the photograph to the right of the heart, which is actually to the left inside the
- 5 body. It looks like a defect consistent with the projectile in 09:52:02
- 6 the left lung.
- 7 Q. I'm going to hand you a red marker, and I'm --
- 8 THE CLERK: I'm not catching you.
- 9 MS. FELDMEIER: Are you not picking me up on the
- 10 microphone?
- 11 THE CLERK: Not, I'm not --
- MS. FELDMEIER: I'm not plugged in yet.
- THE CLERK: Oh, okay.
- 14 BY MS. FELDMEIER:
- 15 Q. I'm going to hand you a red marker and ask you to circle
- 16 | the areas where you see damage.
- 17 A. Thank you.
- 18 (Indicating.) One circle is around the same area that
- 19 has the black circle. The other one is to the right of that in
- 20 the exhibit.
- 21 (Discussion off the record between counsel.)
- 22 BY MS. FELDMEIER:
- 23 Q. So I'm looking here now at 231B. You have circled in red
- 24 | the damage to the lung and the damage to the sac.
- What is the para -- say that again -- sac.

09:52:23

09:52:51

09:53:37

09:53:52

09:54:10

09:54:26

-Emma Lew - Direct Examination -

1 A. Pericardial sac, which means it's around the heart.

2 It is a smooth membranous sac around the heart that

- 3 | contains a small amount of fluid because the heart is beating.
- 4 And that small amount of fluid which has to be around the heart
- 5 allows it to beat freely and not be stuck to the lung on either
- 6 side.
- 7 Q. And is it possible to have damage to that sac but not have
- 8 damage to the artery behind it?
- 9 A. It is possible, because the pericardial sac goes up above
- 10 | the heart to surround what is called the great vessels, which
- 11 also includes the pulmonary arterial trunk and the aorta, the
- 12 | ascending aorta.
- 13 | Q. Now this photograph does not in any way show damage to
- 14 | those areas that you just listed, does it?
- 15 A. It --
- 16 Q. In the photographs.
- 17 | A. The damage to the pericardial sac would be directly over
- 18 | what I mentioned was damage to the aorta yesterday.
- 19 Q. Okay. But that was damage that Dr. Madrigal testified that
- 20 | he saw, but it is not shown in this photograph; correct?
- 21 | A. I do not see any damage to the heart itself.
- 22 Q. Okay. Or to the major arteries in this photograph or the
- 23 | photograph you're looking at.
- 24 A. That is correct.
- 25 Q. Okay. Dr. Madrigal did circle another area that you did

09:54:38

09:54:58

09:55:14

09:55:28

09:55:52

09:56:11

-Emma Lew - Direct Examination -

- 1 | not circle, indicating he thought that represented damage to
- 2 | the heart muscle. What do you think it looks like?
- 3 A. It looks like when he's pulling on the heart it is causing
- 4 | some wrinkling of the tissues, and there's also blood in the
- 5 | photograph. So instinctively when I look at that image, I want
- 6 to take a towel and wipe the blood off, because it looks like
- 7 | there is blood that has collected in a natural cavity as a
- 8 result of pulling on the tissues.
- 9 Q. As opposed to there being damage in that area?
- 10 A. Correct.
- 11 | Q. Okay. And then 232B, is that another view of the heart and
- 12 | its surrounding arteries?
- 13 | A. Yes, it is.
- 14 | Q. And do you see any damage on there, on the photograph?
- 15 A. Yes, I do.
- 16 | Q. Okay. Could you circle that in red?
- 17 A. Yes. (Indicating.)
- I actually see two areas. One that I've circled is
- 19 | around the circle that was made by Dr. Madrigal. And another
- 20 one is just above that, where I see a tear in the soft tissues.
- 21 | Q. And do either of those show or prove that there is a tear
- 22 | in one of the great vessels?
- 23 | A. These areas are very close to the heart. I do not see any
- 24 damage to the great vessels themselves in this photograph.
- 25 Which does not mean that there is no damage to the great

1 | vessels, it's just not shown in the photograph.

2 However, one of these areas is very close to the great 3 vessel, it may be in the pericardial sac.

Q. Okay. Fair enough.

5 Please take a look at 228B and 229B. What do those 6 exhibits describe?

09:56:35

eminates describe.

liver.

4

10

16

17

18

19

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24

25

A. It is a photograph taken during the autopsy showing mostly
the right side of the chest cavity, including the right side of
the spine and the right diaphragm, which is right over the

09:56:55

- 11 Q. And are both of those pretty close to the same photo?
- 12 A. They look very similar.
- Q. All right. I'm going to represent to you that Dr. Madrigal circled some damage that he saw there on both of those

15 photographs with a black marker.

09:57:11

- Please examine the photographs and let us know if you see any damage to the areas -- to any areas in there that would have been caused by a bullet.
- A. Yes. I see actually three areas.
- One is the same area that he has circled, which is the 09:57:27 right side of the spine. All the fractures that I mentioned yesterday, the right side of T8 to T4 of the spine.

Now Dr. Madrigal also described the two other injuries

I'm seeing in this -- in these two exhibits. And he described

them in his autopsy report, but I suspect that he was focusing

09:57:49

- 1 on the spine at the time that he made this circle.
- 2 The other injuries are to the back of the right fifth
- 3 | rib and the back of the seventh and eighth ribs, which he
- 4 described in his report.
- 5 Q. Could you circle those in red, please?

09:58:07

- 6 A. Yes. And the spine as well?
- 7 Q. Yes.
- 8 A. (Indicating.) I made the circles on 228B. Should I make
- 9 them on 229B as well?
- 10 Q. No, that's fine.

09:58:30

- 11 You're representing that they're in both places as
- 12 | shown in 228B?
- 13 | A. Yes.
- 14 | Q. Okay. Talk to us a little bit about that vertebra damage.
- 15 | What did you notice? What struck you when you first observed
- 09:58:41

- 16 | that?
- 17 | A. The fact that it is going up the spine. It's not just
- 18 | involving one of the vertebra, but it involves actually five
- 19 vertebra, T8 to T4.
- 20 Q. And what would that tell you --

09:58:56

- 21 Let me back up. Strike that question.
- In this case the spinal cord was not removed; is that
- 23 correct?
- 24 A. Yes. And Dr. Madrigal did not have the equipment necessary
- 25 | to remove the bone of the spine to allow him to examine the

09:59:11

09:59:27

-Emma Lew - Direct Examination -

- 1 | spinal cord.
- 2 Q. Based upon your experience, can you discuss what happens to
- 3 | the spinal cord when a bullet would hit it and cause the type
- 4 of damage that you are seeing in those photographs?
- 5 A. I would examine the spinal cord. But I would expect some
- 6 | bleeding, even if the spinal cord was intact. I may expect
- 7 | some softening of the spinal cord and some hemorrhage inside
- 8 | the spinal cord. Even though the bullet does not touch the
- 9 | spinal cord, it is so close. It is damage to the bone that
- 10 directly surrounds the spinal cord, therefore, I do expect some 09:59:48
- 11 damage to the spinal cord.
- 12 | Q. And if there is damage to the spinal cord at that location,
- 13 explain to the jury how the body is affected.
- 14 A. With damage to the spinal cord at those levels, we would
- 15 expect some paralysis, some paraplegia. That is, the person
- 16 | would not be able to move their hips and lower extremities.
- 17 | Q. And do you believe to a reasonable degree of -- is it
- 18 | reasonable to believe that that's what happened in this case?
- 19 A. Yes.
- 20 Q. Now I'm going to show you --
- MS. FELDMEIER: I'll need to use the monitor for this
- 22 one, Madam Clerk. And this just to the witness and counsel.
- 23 BY MS. FELDMEIER:
- 24 Q. Dr. Lew, let's move on to the chest cavity. I am showing
- 25 | you what's been marked and admitted as Exhibit 221. Do you

10:00:56

10:00:06

10:00:27

- 1 recognize this?
- 2 A. Yes.
- 3 Q. What is this?
- 4 A. It is a photograph taken of the upper half of the body
- 5 | cavities at the time of autopsy.

10:01:08

- 6 Q. And what do you notice about the amount of blood in the
- 7 | chest cavity?
- 8 A. There is a dark red color to the chest cavity around both
- 9 lungs, and that would be consistent with blood.
- 10 Q. And does that -- is that just streaks of blood, or what are 10:01:26
- 11 | we looking at here, quantity wise?
- 12 A. No, there it is an entire border of blood around each lung,
- 13 | the outside of each lung.
- 14 Q. Would I be overstating it to say that there's a pool of
- 15 | blood around all the internal organs?

10:01:42

- 16 A. Around the lungs.
- 17 Q. Okay. And then also in this photograph do you notice
- 18 | anything about the face of the victim?
- And I'll go ahead and bring this in a little.
- 20 A. Yes.

10:02:01

- 21 Q. What do you notice?
- 22 | A. His upper teeth are not the same as they looked in the
- 23 | scene photographs when he was first turned over. It looks like
- 24 | there is a right upper front tooth missing.
- 25 | Q. And what about under his lower lip, do you notice anything? | 10:02:14

10:02:39

10:03:18

10:03:35

-Emma Lew - Direct Examination -

- 1 A. There is a small red marks or scrapes, abrasions we call them.
- MS. FELDMEIER: Your Honor, this exhibit is not being displayed to the jury in its entirety, but I'm wondering if it would be permissible to Court and defense counsel for me to show what is currently on the screen, and then we will move off of it. I wouldn't show the whole photo, but I would like to
- I'll find another photograph.

demonstrate the tooth and the --

- THE COURT: For the record, the Court was shaking his 10:02:55
- 12 And Miss Feldmeier saw me do it.
- MS. FELDMEIER: I did. And I acknowledged it by saying I would move on.
- 15 BY MS. FELDMEIER:

8

- 16 Q. I'm showing you what's been admitted as Exhibit No. 222.
- What are we looking at here?
- 18 A. We are look ag the inside of the right side of the chest.
- 19 Q. And what do you see there in the right side of the chest?
- 20 A. I see blood.
- 21 Q. And can you in any way estimate the quantity of blood
- 22 | you're seeing here?
- 23 A. It's hard to from a photograph, but it's covering all of
- 24 | the ribs, the back part of the ribs.
- 25 Q. And do you notice anything about coagulation in this photo? 10:03:46

- 1 A. It looks like the blood is coagulated or clotted.
- 2 Q. Directing you then to 223, what is this showing us?
- 3 A. This is a photograph of the left side of the inside of the
- 4 chest. Again, the left side of the chest cavity also contains
- 5 clotted blood.

10:04:07

- 6 Q. And what is significant about the clotted or coagulation of
- 7 blood in a deceased person?
- 8 A. That tells us that the person was alive when they were
- 9 bleeding out.
- 10 Q. Why?

10:04:21

- 11 A. Sometimes -- after death, if blood sort of just drains out,
- 12 | it may not clot. But when a person is alive, in our
- 13 experience, the blood is clotted.
- 14 Q. Okay. And did you notice any injuries within the chest
- cavity that would be consistent with the blood that we are
- 10:04:44

- 16 | seeing in the chest cavity?
- 17 | A. In some of the previous exhibits I saw portions of clotted
- 18 blood.
- 19 | Q. Okay. And what about injury to -- what organs could have
- 20 | caused all that bleeding that you're seeing in the chest
- 10:04:57

- 21 cavity?
- 22 A. Injuries to both lungs were is described in the autopsy
- 23 | report. And as I explained yesterday, two gunshot wounds that
- 24 | entered the back, the right side of the back, would have had to
- 25 go through the right lung and the left lung in order to exit

10:05:14

- 1 above the left axilla, or just next to the left armpit, and on
- 2 | the left side of the chest.
- 3 Q. And would those types of injuries to the lungs cause
- 4 bleeding?
- 5 A. Yes.

10:05:29

- 6 Q. And then the fact that there was coagulation would be
- 7 | indicative that as that bleeding was occurring the victim was
- 8 still alive?
- 9 A. Yes.
- The amount of blood actually in the chest cavities is
- 11 more evidence that the person was alive and the heart was
- 12 beating.
- 13 Q. Let's move on then to bullet wound here on the back. It
- 14 | was not a fatal wound, and it exited through the cheek, back of
- 15 the neck.

10:05:56

10:05:40

- 16 A. Yes.
- 17 MS. FELDMEIER: If I could publish to the jury
- 18 | Exhibit 195 that's already been admitted.
- 19 BY MS. FELDMEIER:
- 20 Q. Dr. Lew, could you show us anything of significance in this 10:06:07
- 21 | photograph?
- 22 | A. The gunshot wound is within the hairline on the left side
- 23 of the back of the neck. But there is also a bruise
- 24 | below -- on the neck below the gunshot wound.
- 25 | Q. Could you circle that on the TV monitor?

10:06:24

10:06:44

-Emma Lew - Direct Examination -

- A. (Indicating.)
- Q. And what does that tell you, as a pathologist, with your experience in the number of autopsies you've performed?
- 4 A. From the body alone we don't usually see bruises like that
- 5 separate from the gunshot wound, in a regular gunshot wound.
- 6 However, having had the benefit of seeing the scene photographs
- 7 | and pictures of the clothing, I believe I know what caused that
- 8 bruise.

1

- As I explained yesterday, there were two holes in the
- 10 back of the shirt just below the gunshot wound. And that tells 10:07:03
- 11 | me the shirt was bunched up so that the bullet went through two
- 12 layers -- those two layers of the clothing, or the shirt,
- 13 before striking and going into the left side of the back of the
- 14 head and neck area.
- And the collar, the shape of the collar, would be very
- 16 | consistent with the energy of the bullet slapping that collar
- 17 | against the skin and causing that bruise. I've seen it usually
- 18 | with other items, such as jewelry, other clothing. It is what
- 19 | we call an intermediary target, where the energy of the bullet
- 20 | then slaps that material against the skin causing its own
- 21 | injuries, in addition to the bullet entering the body.
- 22 Q. So I am showing you on the split screen here the bruising
- 23 on the left photo.
- And then in Exhibit No. 76, which was previously
- 25 | admitted, we have a photo of the victim at the crime scene.

10:08:02

10:07:47

- 1 And if you could show the jury what you're talking about about
- 2 the T-shirt.
- 3 A. Should I circle?
- 4 Q. Sure.
- 5 A. Yes. In the right exhibit there's --

10:08:13

10:08:31

- 6 THE COURT: You have to actually touch it.
- 7 THE WITNESS: Yes, there's hole right there.
- 8 (Indicating.) I'm sorry, I may have covered it.
- 9 And there's a hole right there. (Indicating.)
- 10 And it's below the gunshot wound, and it looks like
- 11 his head may have tilted a bit, or the shirt may have moved a
- 12 | bit.
- But those two holes I believe are associated with the
- 14 | entrance wound on the left side of the back of the head and
- 15 neck.
- 10:08:46

- 16 BY MS. FELDMEIER:
- 17 Q. And that gray T-shirt that we see on the right is
- 18 | associated with the bruise that we see in the photo on the
- 19 left?
- 20 A. Yes. There's no other way to explain that bruise.
- 10:08:55

- MS. FELDMEIER: Is 216 admitted?
- 22 THE CLERK: Yes.
- 23 BY MS. FELDMEIER:
- 24 Q. Okay. I'm going to show you what's been marked as
- 25 | Exhibit No. 216. And I'd like you to use this one to explain

10:09:44

10:10:05

10:10:30

10:10:45

-Emma Lew - Direct Examination -

- 1 | the facial damage that you earlier described to the jury. Feel
- 2 | free to use the touch screen as a demonstrative aid. And
- 3 | explain to us what we're seeing here.
- 4 A. We see all of his abrasions or scrapes on the left side of
- 5 | the forehead, left side of the face. But also, in what we
- 6 discussed earlier, you see a gap between the upper front teeth,
- 7 and that is because there is a tooth missing. And that look
- 8 distinctly how the face looked like at the time of the scene
- 9 where you see all of the teeth present.
- 10 Q. Let me going to go over to the scene photos.
- So I have up here on the screen number 78. And is
- 12 | that the photo that you were referring to for comparison
- 13 between the teeth?
- 14 A. Yes.
- MS. FELDMEIER: 78's admitted, isn't it?
- 16 THE CLERK: It is.
- MS. FELDMEIER: Thank you.
- 18 BY MS. FELDMEIER:
- 19 Q. All right. Now, are you familiar with -- or have you used
- 20 | with me a term called "combination injuries," or a photo that
- 21 | shows a combination of injuries inflicted at different times?
- 22 A. I'm not sure that we have spoken, but I think I understand
- 23 | what you mean.
- Q. Okay. Using the photographs that are up on the screen in
- 25 | exhibits number -- for the record, number 216 and number 78,

10:11:04

10:11:32

10:11:52

10:12:10

-Emma Lew - Direct Examination -

- 1 | could you explain, based upon your review of all of the
- 2 evidence in this case, what you believe we are seeing in these
- 3 | photographs?
- 4 A. We see obvious injuries to the left side of the face. But
- 5 | then if you were to land on the left side of your face, it
- 6 doesn't explain why your right upper front tooth is knocked
- 7 out. And it doesn't really explain the abrasions or scrapes in
- 8 the midline of the chin.
- 9 So I believe there were several movements of the head,
- 10 at least a couple of movements of the head.
- 11 Q. All right. I will expand the actual one at the crime
- 12 | scene.
- And looking at this photograph, could you talk to us
- 14 about this wound here that we see, I'm circling. If you can
- 15 | circle that on the computer.
- 16 A. (Indicating.)
- 17 Q. And then describe for us what we are seeing emanating to
- 18 | the left from that wound.
- 19 A. Yes. You see a trail of blood coming from the area that I
- 20 just circled, across the left upper eyelid.
- 21 Q. Could you draw that?
- 22 A. (Indicating.)
- 23 Q. And where does it go?
- 24 A. In another photograph I saw just two days ago, there are a
- 25 | couple of streaks of blood that run straight down the nose.

10:12:42

10:12:26

10:13:09

10:13:30

10:13:44

10:14:16

10:14:39

-Emma Lew - Direct Examination -

- 1 You see one of them here. (Indicating.)
- 2 Q. So based upon your examination of the wounds on this face,
- 3 | what's your opinion as to the only source of the blood that can
- 4 | be -- that you've shown blood rivulets for?
- 5 A. The only source for the trails of blood that I saw in the
- 6 other photograph that run down the nose is this abrasion here
- 7 | that I've circled. (Indicating.) It looks fairly deep, so an
- 8 | abrasion like that could definitely bleed a small amount like
- 9 you see here in the trail that goes across the left upper
- 10 eyelid.
- 11 Q. So -- and that abrasion would have -- that abrasion, plus
- 12 | the embedded concrete we see there, and the other abrasions on
- 13 | the left cheek, are those all consistent with falling to the
- 14 | ground on the left side of the face?
- 15 A. Yes.

17

- 16 Q. And we'll show that other photo in just a little bit.
- 18 injury that you learned about to the brain stem in this case.

But if you could, talk to us a little bit about any

- 19 | A. Originally when I interviewed Dr. Madrigal in August of
- 20 | 2017 I had asked whether the bullet had gone through the brain
- 21 stem. And there was probably some miscommunication, but at
- 22 | that time the answer was yes.
- But I've since learned that Dr. Madrigal has corrected
- 24 | me and said that, no, he cut away the brain stem. However, he
- does agree that there is some damage to the right side of the

10:15:03

10:15:45

10:16:01

-Emma Lew - Direct Examination -

- 1 | brain stem, which is shown in the autopsy photographs.
- 2 Q. So with the damage to the brain stem that you saw, and that
- 3 he verified in that autopsy photograph, what type of physical
- 4 reaction would a body have to receiving that wound?
- 5 A. Most gunshot wounds to the head that go through the skull
- 6 and brain would cause immediate incapacitation, meaning the
- 7 person would collapse. And in this particular case where the
- 8 | brain stem is involved, that's even more serious, because the
- 9 brain stem controls heart rate and respiration.
- 10 Q. And what is important about heart rate and respiration when 10:15:23
- 11 | it comes to the movement of blood throughout the body?
- 12 | A. If you don't have the heart beating, you're not
- 13 | actively -- I'm sorry. If you don't have a heart beating,
- 14 | you're not actively bleeding, because the heart is not pumping
- 15 | blood to areas of injuries.
- 16 Q. So the blood would just stay stationary within all of the
- 17 | various arteries, capillaries, veins of the body, unless it
- 18 | finds an exit location?
- 19 A. Yes. If there's already an injury, blood will drain out.
- 20 It won't be bumped out.
- 21 | Q. And that type of blood tends not to coagulate; correct?
- 22 A. There it wouldn't be a large volume of blood. Because, for
- 23 example, in motor vehicle crashes where victims have horrendous
- 24 | injuries, rib fractures and tears to the heart and vessels and
- 25 | lungs and spinal fractures, when we get inside there's very

10:16:23

10:16:49

10:17:07

10:17:28

10:17:55

-Emma Lew - Direct Examination -

- 1 little blood inside the chest cavities.
- 2 Q. I'd like to show you now, move on to what's been marked now
- 3 | as Exhibit No. 73. Again, these are photos taken by one of the
- 4 Mexican crime scene investigators.
- 5 In this position, Dr. Lew, does your medical training
- 6 give you any indication of what may have caused an individual
- 7 to end up in this position?
- 8 A. There are any number of possibilities, but in this
- 9 particular case I believe it was the gunshot wound to the back
- 10 | that caused him to have immediate paralysis. And because he
- 11 | was probably running forward, leaning forward, the momentum
- 12 | just allowed him to pitch forward on his face.
- 13 Q. Could you circle the areas of the body that after that shot
- 14 | to the spine would be completely immobilized?
- 15 A. Oh, definitely from, you know, the waist on down.
- 16 (Indicating.)
- 17 Q. And showing you now what's been marked as Exhibit 74,
- 18 can -- let's talk a little bit about the blood that is coming
- 19 out of two of the wounds, number 4 and number 5.
- 20 Could you start by circling number 4?
- 21 | A. The wound would be around here. But I see that there may a
- 22 | bullet hole here, but the wound itself may be a little bit
- 23 | lower, because the shirt has shifted, it shifted upward.
- 24 Q. And then bullet wound 5, is that --
- 25 Thank you.

10:18:15

- 1 Now we're looking at this photograph. What does it 2 tell you about blood flow?
- 3 A. If you look at number 4, which is on the right upper back of the shirt, the blood, as I explained yesterday, is flowing 4 to the right shoulder.

10:18:30

- There is a lot of blood, and flowing to the right 6 7 shoulder.
- 8 Q. Now in order for that blood to have made it up in that quantity and out, would the heart have had to be beating?
- 10 A. I believe so, yes.

10:18:44

- 11 Q. Okay. What about the one on the left that you circled,
- number 5? 12

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- 13 Probably also, yes.
- 14 So the heart, in your opinion -- the victim would have been
- alive when both of these shots were sustained? 15

10:18:54

- 16 A. Yes.
- Q. And shortly thereafter? 17
- 18 Α. Yes.
- 19 Q. Now, you can generally indicate to the jury where number 6,
- 20 7 and 8 are on the back.

10:19:05

- 2.1 And again, I think you've testified the shirt has
- 22 probably slipped upward; right?
- 23 A. Yes.
- 24 Q. Okay.
- 25 But this would be the bullet hole corresponding with number 10:19:14

10:19:29

10:19:46

10:20:01

10:20:25

-Emma Lew - Direct Examination -

- 1 6, this would be the bullet hole corresponding with number 7,
- 2 | this would be the bullet hole corresponding with number 8.
- 3 (Indicating.)
- 4 Q. So conversely now, we have a lack of blood in that area.
- 5 Does that necessarily mean that the heart has stopped beating
- 6 at the time these were inflicted?
- 7 A. No, not necessarily. It would mean that the person was
- 8 | already face down on the ground, and blood would not be coming
- 9 up through the skin, it would be draining down into the
- 10 cavities.
- 11 Q. So in your opinion then, why would the blood have drained
- 12 out in the upper two wounds but not the bottom three wounds?
- 13 A. You'll notice that those are higher on the body. There
- 14 | would have been more movement of the upper parts of the body.
- 15 Q. Is this also consistent with your theory that the decedent
- 16 | pushed up on his left arm enough so that his body twisted?
- 17 | A. I believe at some point, because -- I believe there's video
- 18 | evidence, and then there's evidence on the body itself -- that
- 19 he was able to reach up with his left arm at some point. And I
- 20 | believe he was up on his right side at some point, thereby
- 21 | allowing the blood to flow to the right shoulder as you see in
- 22 this exhibit.
- 23 | Q. So, Dr. Lew, were you able to record three different head
- 24 positions in the decedent after he -- upon hitting the ground
- 25 | and thereafter?

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Emma Lew - Direct Examination -

I believe we can support -- we have supportive evidence for three different movements of the head.

The first would be falling on the left side of the face. And then -- well, to sustain that injury, the abrasion that caused the trail of blood to come down the nose. And in order for that trail of blood to then come up across the upper eyelid and then down the nose, the head would have to be lifted and maybe pointing down a bit towards the navel in order to allow gravity to take blood from the cheek and upwards across the upper eyelid, and then a movement again to bring the trails 10:21:30 of blood down the front of the nose.

Now in that position, he may have been able to be shot with qunshot wound number 2 to the right side of the head. after being shot in that position, his head would then drop like a stone onto the concrete. It's a short distance, but when you take around nine pounds of the head dropping just like a stone onto the concrete, that could potentially knock out a front tooth and cause the abrasions below the midline of the chin.

Then after dropping down, his head was able then to roll and tilt to its final position on its right side, with the face turned a little bit to the left, as opposed to the initial landing on the left side of the face.

MS. FELDMEIER: At this time I would like to introduce into evidence an exhibit that we will tie up with one of our

10:23:12

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10:23:50

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10:24:42

-Emma Lew - Direct Examination -

- following witnesses. It's 382 which is a long shot out, and then 356, which is zoomed in a little closer to the face.
- Okay. I move the admission of 356 and 382 and

 ask -- or at this time ask that it at least be published to the
- 5 jury for demonstrative purposes, and I will tie it up later.

6 MR. CHAPMAN: No objection.

7 THE COURT: All right. 356 and 382.

8 (Exhibit Nos. 356 and 383 admitted into evidence.)

9 BY MS. FELDMEIER:

10 Q. Okay. I'm going to start, Dr. Lew, with 382 on this

11 screen.

- Okay. I'm showing you a photograph of the decedent at
- 13 | the crime scene. And this is the zoomed-out version. And I'm
- 14 going to go to the ELMO right now and show you a more up-close
- 15 picture.

16 That was 382, now I'm going to show you 356.

- 17 It's a little pixilated. But, Dr. Lew, can you
- 18 describe for us the blood drips that you are talking about
- 19 here?
- 20 A. Yes. You can see two parallel red lines running down the
- 21 | nose. Those are two trails of blood.
- 22 Q. Now, Dr. Lew, you just described on the stand a way that
- 23 | those two trails of blood could have been pulled down by
- 24 | gravity. So what I'm going to do is I'm going to take this
- 25 | photograph, and I'm going to rotate it until those trails of

blood are perpendicular to what is going to become my new ground plane, which is this one.

If this is the ground plane, with the head rotated in this position, is this describing -- please describe for us what we would be seeing here.

10:25:10

10:25:49

- A. You'll notice that now, with the head turned in this
- position, facing directly downward, you can see how blood would run directly down the front of the nose.
- 9 Q. And so -- go ahead.

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- 10 A. Blood, of course, drains down according to gravity. So you 10:25:25
- 11 | don't expect blood to go off to the side, you expect it to
- 12 trail down according with -- to gravity.
- 13 Q. So then based upon this position, would it be reasonable to
- 14 | believe that the decedent was facing forward, had lifted off
- 15 | his left cheek, was facing chin down, and began to lift his
- 16 | head up facing due west?
- 17 A. Yes. That would explain how the blood came from the
- 18 | abrasion on the left cheek, up across the left side -- the left
- 19 upper eyelid, and then run down the nose.
- 20 | Q. Would it also then explain how if the decedent's head was
- 21 | in that lifted position you could accomplish gunshot wound
- 22 | number 2, which we see here, we see the bullet exit wound 4.
- 23 Can you circle where the bullet lodged?
- 24 A. Yes. This bump here is where the projectile came to rest
- 25 | under the scalp. (Indicating.)

10:26:29

10:26:08

- 1 Q. And so could that projectile have been accomplished from
- 2 | the elevated position you saw when you went out to the crime
- 3 | scene?
- 4 A. Yes.
- 5 | O. So then --

10:26:39

- 6 MS. FELDMEIER: If we can clear the screen, please.
- 7 Thank you.
- 8 BY MS. FELDMEIER:
- 9 Q. So then is it my understanding then of your testimony that
- 10 upon getting hit with that shot, the head would have then just
- 11 | come down like this to its final resting position?
- 12 | A. Likely striking the front of the face first, and then
- 13 | rolling terminally so that it finally faces to the left.
- 14 | Q. Okay. Now I'd like to go through the positions that you
- 15 | noted regarding the arms of the victim.

10:27:14

10:26:51

- 16 A. Yes.
- 17 | Q. I think this exhibit is also demonstrative of that.
- 18 What is your belief, based on the evidence, as to the
- 19 initial position of the decedent's body when it first hit the
- 20 ground?

10:27:30

- 21 | A. Using this exhibit, you can see there is cement dust on the
- 22 back of the left hand. And there are abrasions or scrapes on
- 23 the backs of both hands.
- So I believe that he fell -- when he initially fell,
- 25 | he fell on the left side of his face and on the backs of his

10:27:45

- 1 hands.
- 2 Q. And where would that be consistent with -- if you could
- 3 demonstrate for the jury where the hands might be as the
- 4 decedent was falling.
- 5 A. They would be anywhere under the torso.

10:27:57

- 6 Q. So, again, the body had the ability to at least bring those
- 7 | hands above the waist.
- 8 A. Yes.
- 9 Q. Because even with the theory that number 4 was the first
- 10 | shot, the body is still operating from the pelvis up.

10:28:13

- 11 A. Yes.
- 12 | Q. Okay. Also then, if that was the first position, we're
- 13 | clearly not seeing this here in this picture, the terminal
- 14 position. So there had to be movement between that first
- 15 | impact and this terminal position; correct?

10:28:28

10:28:45

- 16 | A. Yes. Because you would expect, if he had not moved after
- 17 | falling the first time, both arms would still be under the
- 18 | torso, and you won't be able to see the left forearm and the
- 19 left hand out to the side of the body.
- 20 | Q. Okay. So, however, we also add in another factor. And
- 21 | that's that the doctors found two bullets in the upper left arm
- 22 | that you testified came from qunshot wounds to the back.
- 23 A. There was one bullet that could not otherwise be explained,
- 24 and one exit wound that could not otherwise be explained.
- Q. And when you mean "otherwise," as to what position would

10:29:08

- 1 | the arm need to be in in order to accomplish that trajectory?
- 2 A. So that exit and that extra bullet would match up with the
- 3 | two gunshot wounds to the left side of the back.
- 4 Q. And then what about the arm, the left arm, where would that
- 5 | need to be?

10:29:28

- 6 A. In order for the bullet to end up near the elbow in the
- 7 left upper arm, after coming from the lower back, the left arm
- 8 | would have to be up like this. (Indicating.)
- 9 Q. And that is not the position we see the body in here.
- 10 A. No.

10:29:43

- 11 | Q. So in your opinion how could the -- the hand have gotten
- 12 | from the position it needed to be in for that trajectory to
- 13 | what we see as the terminal position?
- 14 A. The victim drew it back. After reaching forward, he
- 15 brought his arm back down by his side.

10:29:59

- 16 | Q. Now did you have an opportunity to review the videos of the
- 17 | incident in this case?
- 18 A. Yes.
- 19 Q. And I'm going to bring up what's been admitted as the
- 20 | side-by-side.

10:30:19

- MR. CHAPMAN: The what?
- 22 MS. FELDMEIER: The side-by-side video.
- 23 BY MS. FELDMEIER:
- 24 Q. Okay. Dr. Lew, I'm going to forward this.
- And in your consultation on a case like this, does the 10:30:51

10:31:10

10:31:56

10:32:28

10:32:46

-Emma Lew - Direct Examination -

- 1 | timing of the shots also play into your -- both the number of
- 2 | shots as well as the gap between shots play into your analysis
- 3 of which wounds could have come before other wounds?
- 4 A. Sometimes, yes.
- 5 Q. So in this particular case, did -- you had an opportunity
- 6 to review the video I have up here, which is marked as
- 7 | Government's Exhibit 329.
- 8 A. Yes.
- 9 Q. All right. I'm going to move it forward to the sequence.
- Now in this particular sequence, on the right do we
- 11 see -- we see three individuals who appear to be making
- 12 | throwing motions.
- And I'm going to stop it as soon as Agent Swartz gets
- 14 to the fence.
- So this would be the first sequence of shots that
- 16 | occurred, if the jury were to believe the bullet casings come
- 17 | from the gun at this location.
- 18 At this location do you see movement in the
- 19 | individuals on the Mexican side?
- 20 A. It's stopped right now.
- 21 | Q. I stopped it. But leading up to that were they moving?
- 22 A. Yes.
- 23 Q. Okay. Then in this video, right where I stopped it, did
- 24 | you see Agent Swartz break contact with the fence on the right
- 25 | side and begin to move west -- westward?

10:33:02

- 1 A. Yes.
- 2 Q. Okay. Now looking on the left-side screen, if we could
- 3 | concentrate on that for a moment. Do you see the decedent?
- 4 A. I see a figure in the middle of the street.
- 5 Q. That's highlighted? On the left side.

10:33:16

- 6 A. Oh, yes, on the left. Okay.
- 7 Q. You're looking at the motorcyclist running down the middle
- 8 of the street.
- 9 So looking now on the left screen --
- 10 A. Yes.
- 11 | Q. -- do you see a figure highlighted?
- 12 A. Yes.
- 13 Q. Does that figure appear to be standing or on the ground?
- 14 A. On the ground.
- 15 Q. Okay. And does the general body position of that body
- 16 | figure appear to be consistent with some of the crime scene
- 17 | photos you've seen as far as the position of the lower body?
- 18 A. Yes.
- 19 Q. Okay. So based on this, the decedent is on the ground; is
- 20 | that correct -- or if this is believed to be the decedent.

10:33:51

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- 21 A. Yes.
- Q. Now if we watch the right screen, Mr. Swartz continues to
- 23 move down the fence line.
- 24 And I will pause the video when he makes contact with
- 25 | the fence again.

10:34:04

- 1 Mr. Swartz has just made contact with the fence on the
- 2 | right side. What do we see about the highlighted individual on
- 3 | the left side, as far as body location? General overall gross
- 4 body location.
- 5 A. Okay. On the left side of the screen?

10:34:18

- 6 Q. Yes, the left screen, camera 6.
- 7 A. It is face down on the sidewalk -- or it's down on the
- 8 sidewalk.
- 9 Q. Yeah, you can't tell which way the face is?
- 10 A. Correct.

10:34:30

- 11 | Q. Okay. But does it appear that the lower body has moved at
- 12 | all off of its previous location?
- 13 | A. No.
- 14 | Q. Or does it appear still to be splayed out?
- 15 A. Yes.

10:34:40

- 16 Q. Okay. Moving forward now, Agent Swartz remains at the
- 17 | fence.
- And I just scooted by real quick. Again, we
- 19 | highlighted -- I'll play it again, see if I can it. We go from
- 20 one camera --

10:34:57

- 21 What is it that we appear to see here on --
- 22 You've seen infrared videos before; right?
- 23 A. Yes.
- 24 | Q. This isn't the best quality you've ever seen; correct?
- 25 A. No, not the best resolution, no.

10:35:09

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-Emma Lew - Direct Examination -
 1
     Q. No. But based on your experience in reviewing this, and
 2
     all your years in law enforcement, what is it that we're
 3
     looking at here?
     A. We're looking at a person who is face down on the
 4
     ground --
 5
                                                                        10:35:24
              MR. CHAPMAN: Objection, Your Honor.
 6
              May I approach the bench?
 7
 8
         (At sidebar on the record.)
 9
              MR. CHAPMAN: Now is she an expert in infrared video
10
     too?
                                                                        10:35:45
11
              MS. FELDMEIER: No. I'm just asking just based on her
12
     lay experience over time what does she see.
13
              MR. CHAPMAN: The video speaks for itself. If she
14
     sees movement in the video, she sees movement. But trying to
15
     qualify her as some sort of expert --
                                                                        10:35:56
              MS. FELDMEIER: I apologize, I'm not trying to qualify
16
17
     her as an expert.
18
              MR. CHAPMAN: -- is not appropriate.
19
              THE COURT: Okay.
20
              MS. FELDMEIER: And I'm not going to any other expert
                                                                        10:36:03
21
     questions, I'm just going to ask her what she's seeing as far
22
     as movements.
23
              THE COURT: All right.
         (End of discussion at sidebar.)
24
25
     BY MS. FELDMEIER:
                                                                        10:36:19
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- 1 Q. Dr. Lew, what do you see depicted on the left screen,
- 2 camera 6?
- 3 A. I see a head towards me, and I see one of the arms reaching
- 4 up above the head.
- 5 Q. Would the arm position that you are seeing here be

10:36:31

- 6 consistent with the back wound that we were discussing earlier
- 7 | with the two exit wounds in the torso and the arm?
- 8 A. That would be consistent with the two gunshot wounds to the
- 9 left side of the back, with one exiting the left upper arm, and
- 10 | with the bullet staying in from the other gunshot wound in the
- 11 left upper arm.
- 12 Q. Okay. I will continue the video.
- On the right Agent Swartz stays at the fence. The
- 14 infrared video moves.
- And do you see any change in that arm on camera 6?

10:37:04

10:37:29

10:36:50

- 16 A. Yes, it is not stretched out as much, it's more rounded.
- 17 | So it looks like the arm is not -- the hand is closer to the
- 18 body.
- 19 Q. In your opinion, could an individual have moved from this
- 20 arm position that we saw on the one screen to the more pulled
- 21 | in one if he had already received the fatal head shot?
- 22 | A. No.
- 23 Q. So, Dr. Lew, we have two scenarios that are being presented
- 24 in this trial.
- Scenario number one is that the first shot -- not the

10:38:02

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-Emma Lew - Direct Examination -

first shot, but one of the first shots that resulted in the victim falling to the ground, as we see in this video, could have been gunshot wound number 2, has been proposed.

Is -- are the wounds that you see to the right side of the face consistent -- or the left side of the face, the bruising, the abrasions and the -- and the impacted sidewalk, are they consistent with number 2 being the shot that brought him to the ground?

9 A. It could be, yes.

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- Q. But, based on all the other evidence you know, that you have blood drip that's coming the nose, that you have a terminal position on the opposite cheek, is it consistent that the head shot could have been the shot that brought him to the ground?
- 15 A. If the head shot had been received first, there would be no 10:38:57

 16 more movement after the victim strikes or hits the ground.
- Q. So accordingly, the blood drips we see would be inconsistent with that theory?
- 19 A. That is correct.
- 20 Q. As would his terminal position.
- 21 A. Yes, with his face turned to the other side.
- Q. Meanwhile, the arm movements that are seen, the fact that
 there is dust on the back from the first impact, that there's a
 bullet trajectory that only matches with an extended arm, and

25 that we have a terminal position in the down position, is that

10:39:47

10:40:04

-Emma Lew - Direct Examination -

- 1 | consistent with the head shot being the first shot?
- 2 A. It is not. Because, again, after receiving a head shot
- 3 like that, and collapsing to the ground, there would be no more
- 4 movement.
- 5 Q. So even without the video, you have forensic evidence of
- 6 these various movements that we all described before we saw the
- 7 | video; right?
- 8 A. Yes, there is physical and anatomical evidence.
- 9 Q. Now let's talk about the idea that the gunshot wound to the
- 10 | back, number 4, could have been the primary -- the one that
- 11 | brought the decedent to the ground.
- 12 A. Yes.
- 13 Q. Are the head movements that you've described, the three
- 14 different head movements, consistent with that theory?
- 15 A. Yes. Because the head and neck area and the arms would not
- 16 be paralyzed.
- 17 Q. And the fact that we see some of the bleeding on the back
- 18 of the shirt, would it be consistent -- or do you
- 19 believe -- well, I'm going to withdraw that question.
- 20 And the arm movements, are they also consistent with
- 21 | the theory that gunshot number 4 is what brought the decedent
- 22 to the ground?
- 23 | A. Yes. As I said before, there's no paralysis of the arms.
- 24 Q. So let's go back to where we started this entire
- 25 | examination of you, with the four questions that the

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-Emma Lew - Direct Examination -

U.S. Attorney's Office asked you.

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Which of the ten bullets that struck Jose Elena was the fatal bullet, or bullets?

- A. The most serious wound was the gunshot wound number 2 to the head, which went from the right side of the head right through to the left side of the head. That would be
- immediately incapacitating, death occurring shortly thereafter.
- Q. Where in the sequence was the fatal bullet inflicted during the course of the discharge of the firearm? Which is probably not the most artfully worded question.

But where in that sequence of victim falling to the ground and shots continuing would the fatal wound have been inflicted?

- A. The head wound would have been inflicted after all the movements of tilting to the right side, reaching up, and then reaching back, with the left upper arm, it would be after that. And it would likely be after the two gunshot wounds to the right side of the back to allow time for the heart to continue to beat and allow blood to collect in both sides of the chest cavity.
- Q. And I'm not going to go over the last two questions, because I think we've been discussing that in the last hour.

But then as a result of your consultations, did you write a detailed report, three pages long, attached to the list of the items you reviewed?

-Emma Lew - Cross-Examination-1 A. Yes. 2 Q. And did you cite within there the different photographs and 3 the bases for your reasons? 4 A. Yes. Q. Okay. And that report is listed as Exhibit 278. I'm not 5 10:42:28 moving the admission of it, but --6 7 A. Yes. Q. You have referred to it. A. Yes. 10 And you have it with you on the stand. 10:42:38 11 A. I do. MS. FELDMEIER: No further questions, Your Honor. 12 MR. CHAPMAN: Your Honor, would it be possible to take 13 14 a break now so I can get myself organized? 15 THE COURT: Let's take ten minutes, ten minutes. 10:42:55 (Recess at 10:42 a.m., until 10:58 a.m.) 16 17 THE COURT: Let the record show the jury has returned back to the courtroom, the presence of all counsel and the 18 19 defendant. 20 Mr. Chapman, whenever you're ready you may proceed. 10:58:38 2.1 MR. CHAPMAN: Thank you, Judge. 22 CROSS-EXAMINATION 23 BY MR. CHAPMAN: 24 Q. Good morning, Dr. Lew. I have some questions for you. 25 I'll let you get the mic. 10:58:48

—Emma Lew - Cross-Examination -

- 1 A. Good morning, Mr. Chapman.
- 2 Q. I'm going to be asking you some questions about your
- 3 opinions. And before I start, I want to talk to you about your
- 4 report that you prepared.
- 5 Do you have it in front of you?

10:59:02

- 6 | A. Yes, I do.
- 7 Q. And it's seven pages long?
- 8 A. Yes, it is.
- 9 | Q. Dated August 28th, 2017?
- 10 A. Yes.

10:59:14

- 11 | Q. And in that report it looks like the first five pages
- 12 discuss the documents and other physical evidence that you
- 13 reviewed in preparation for formulating your opinions in this
- 14 | case. Is that correct?
- 15 A. Yes, that is correct.

10:59:40

- 16 | Q. Did you review anything else that hasn't been identified in
- 17 | this report?
- 18 A. Yes. One photograph that was shown to me Tuesday night
- 19 after I arrived in Tucson.
- 20 Q. Okay. Anything else?

10:59:56

- 21 A. I do not believe so.
- 22 Q. All right. I want to cover some of the things that you
- 23 | reviewed. But before I do that, can I ask you, do you believe
- 24 | that this report comprehensively states what your opinions are
- 25 | in this matter?

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-Emma Lew - Cross-Examination -

- 1 A. Yes.
- 2 Q. You haven't left anything out?
- 3 A. Not that I recall, no.
- 4 Q. Okay. And that the documents identified, with the
- 5 exception of the photo that you saw Tuesday night, everything
- 6 else that you've looked at to form your opinion is identified
- 7 | in this report; is that right?
- 8 A. Yes.
- 9 Q. And I assume that the documents and other evidence -- I'll
- 10 ask it a different way.

The documents and other evidence that you identified

- 12 | in your report helped form the basis for your professional
- 13 opinions in this case.
- 14 A. Yes.
- 15 Q. True?
- 16 A. That is true.
- 17 | Q. So I want to talk to you about a couple things that you've
- 18 | identified as reviewing.
- Number 8, item number 8 on the first page, you
- 20 | identify that you reviewed a November 28th, 2016
- 21 | interview -- or memorandum of interview of Dr. Javier Diaz
- 22 Trejo and Dr. Absalon Madrigal Godinez, with attachments and
- 23 photographs. Is that correct?
- 24 | A. Yes, sir.
- 25 Q. Then on paragraph 9 -- or number 9 at page 1, you also

11:01:50

---Emma Lew - Cross-Examination -

- 1 | indicate that you reviewed a November 28th, 2016 interview of
- 2 Dr. Diaz Osuna with photographs. Correct?
- 3 | A. Yes.
- 4 | Q. Were you aware -- well, let me back up.

5 Do you remember --

11:02:16

11:02:28

11:02:46

- 6 MS. FELDMEIER: May I just real quickly correct the
- 7 record, that number 9 is not a doctor's interview.
- 8 BY MR. CHAPMAN:
- 9 Q. That's right. I said "doctor." I apologize.
- 10 It was the interview of Manuel Diaz Osuna with
- 11 | photographs. Is that right?
- 12 A. Yes.
- 13 Q. All right. Let me get back to number 8.
- 14 You reviewed this 2016 memorandum of interview of
- 15 Diaz Trejo and Madrigal Godinez. Was that a summary report
- 16 | prepared by Dr. Arrasmith -- I mean Agent Arrasmith?
- 17 A. I do not remember. There was so many documents you would
- 18 | have to show me.
- 19 Q. Do you remember what they stated in that memorandum?
- 20 A. Independently right now, no.

11:03:09

- 21 | Q. All right. Well, let me pull it up for you.
- Let me just ask you generally speaking, do you
- 23 remember that in that interview Diaz Trejo and Madrigal Godinez
- 24 | were asked to express their opinions on the timing and
- 25 | sequencing of the shots that occurred in this case?

11:03:58

-Emma Lew - Cross-Examination -

- 1 A. I vaguely remember something, but --
- 2 Q. All right. But obviously it's in your report and you
- 3 reviewed it, so it's significant for the ultimate opinion that
- 4 you've testified to today; right?
- 5 A. I review all the materials submitted to me, then I make up
- 6 | my own opinion based on the physical evidence.
- 7 Q. All right. Here's what I'd like to know: Were you given
- 8 any information regarding a meeting that Dr. Diaz Trejo and
- 9 Dr. Madrigal Godinez had in 2014?
- 10 A. I heard about that meeting during this trip out here.
- 11 | Q. Okay. So that's not in your report?
- 12 | A. It probably is not.
- 13 Q. All right. And that's not something that was incorporated
- 14 | into your opinions when this report was authored in August of
- 15 2017?
- 16 A. If it was not submitted to me, the answer is, no, I did not
- 17 | incorporate that report into my opinion.
- 18 | Q. All right. Were you aware that in August of 2014
- 19 Dr. Diaz Trejo specifically rejected the idea that the shot
- 20 | to the thoracic vertebra brought the deceased down to the
- 21 ground?
- 22 A. That's fine. That's Dr. Diaz' opinion. He is an expert.
- 23 | Q. Were you aware that in 2014 he specifically and clearly
- 24 stated that it was his opinion that the fatal shot, gunshot
- 25 | wound number 2, behind the right ear, was inflicted while the

UNITED STATES DISTRICT COURT

11:04:12

11:04:36

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11:07:08

- deceased was standing, he fell down, and he was essentially killed instantly and collapsed.
- Were you aware that that was his opinion back in 2014?
- 4 A. I may have been aware of that, yes.
- 5 Q. And that part of the basis of that opinion was that the
- 6 abrasions on the backs of the hands that we've talked about,
- 7 and on the face, were consistent with getting a injury like a
- 8 | qunshot wound number 2 that caused instant loss of motor
- 9 control.
- 10 A. I agree with that.
- 11 Q. So the Government didn't give you that information before
- 12 | you generated this report?
- 13 A. I do not remember.
- 14 | Q. Well, it's not incorporated in your report; is that right?
- 15 A. That is correct.
- 16 | Q. Did you review the opinions of Dr. Wecht in this case, the
- 17 defense pathologist?
- 18 A. No, they -- Miss Feldmeier did not allow me to see
- 19 Dr. Wecht's report.
- 20 Q. Okay. Do you know why?
- 21 A. To keep me independent, I presume.
- 22 Q. Okay.
- 23 A. Am I mixing up experts?
- 24 (Discussion off the record between counsel.)
- 25 BY MR. CHAPMAN:

11:07:35

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11:08:39

-Emma Lew - Cross-Examination -

- 1 Q. Are you talking about the Dr. Di Maio instead of Dr. Wecht?
- 2 A. Yes, I'm sorry. Yes, I am mixing up these two experts.
- I did see Dr. Wecht's report, I did.
- 4 Q. He didn't generate a report.
- 5 A. I saw a supplemental --
- 6 Q. All right. He hasn't generated any reports. I did send
- 7 | summaries of his opinions to the Government in letters written
- 8 by me. Did you see those?
- 9 A. I saw at least one of those documents, yes.
- 10 Q. Okay. That's not referenced in this report though;
- 11 | correct?
- 12 A. That is correct.
- 13 | Q. All right. Now, it looks like you reviewed, in addition, a
- 14 | great deal of material by a forensic animator identified as
- 15 | James Tavernetti. And that's number 15 on page 2. Is that
- 16 right?
- 17 A. Yes.
- 18 | Q. Including his recreations of the shooting event,
- 19 | side-by-side alignment, Camera Match, fly around, shooting
- 20 | sequence, all that; is that right?
- 21 A. Yes.
- 22 | Q. And that formed part of the basis of your opinions in this
- 23 | case; correct?
- 24 A. Not really.
- 25 | Q. Well, you reviewed it though.

11:09:11

11:09:02

-Emma Lew - Cross-Examination -

- 1 A. Yes.
- 2 Q. You also reviewed the infrared video that was just shown to
- 3 | the jury --
- 4 A. Yes.
- 5 | Q. -- is that right?

11:09:21

11:09:43

- 6 A. Yes.
- 7 Q. Did you review any of the materials prepared by the defense
- 8 | expert, Eugene Liscio?
- 9 A. If it's not listed, I did not review it.
- 10 Q. Okay. Did you review any of the materials prepared by
- 11 defense expert Grant Fredericks?
- 12 A. Again, I do not remember a report by Grant Fredericks.
- 13 Q. All right. Did you know that the infrared video --
- 14 I'll strike that question.
- 15 I'll put it this way: Then you're not aware that next
- 16 | week the defense is going to present evidence to the jury that
- 17 | the infrared video that you testified about is completely
- 18 | unreliable?
- MS. FELDMEIER: Objection, none of this is in evidence
- 20 and she didn't review Grant Fredericks' reports.

11:10:33

11:10:43

- 21 THE COURT: Overruled.
- 22 BY MR. CHAPMAN:
- 23 | Q. Could you hear that between everyone talking?
- 24 A. Please repeat the question.
- 25 | Q. Okay. Did you know that the defense -- since you haven't

11:10:59

11:11:33

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11:12:06

11:12:12

—Emma Lew - Cross-Examination -

- 1 reviewed the defense experts, did you know the defense next
- 2 | week is going to present expert testimony that that infrared
- 3 video is completely unreliable?
- 4 A. That's fine.
- 5 Q. Let me ask you some questions again about gunshot wound
- 6 number 2 behind the right ear.
- 7 It sounds like you're in agreement that that shot
- 8 | would cause complete loss of motor function in the upper
- 9 | extremities.
- 10 A. I would agree with that, yes.
- 11 | Q. And basically if that shot was received while the deceased
- 12 | was standing, he would fall down --
- 13 A. Yes.
- 14 | Q. -- right?
- And by losing complete function of his extremities,
- 16 | that includes his ability to put his hands out like this and
- 17 | arrest his fall. Is that true?
- 18 | A. Yes.
- 19 Q. Which could lead to the possible situation where he gets
- 20 hit, he falls forward, and the backs of his hands are
- 21 abraded --
- 22 A. Yes.
- 23 Q. -- right?
- 24 | A. Correct. Yes.
- 25 | Q. And that could also account for the abrasions on the left

11:12:31

11:12:54

11:13:03

11:13:26

-Emma Lew - Cross-Examination -

- 1 | side of his face.
- 2 A. Yes.
- 3 Q. That could account for the loosening and loss of teeth.
- 4 A. If he landed on the left side of his face, to cause the
- 5 abrasion on the left cheek, which then oozed blood, or leaked
- 6 blood, it's hard to explain the injuries in the front of the
- 7 face, the midline of the face.
- 8 Q. Well, you said in your report that the right incisor was
- 9 damaged, not just the left incisor.
- 10 A. Yes.
- 11 Q. And you also indicated when you testified earlier that he
- 12 | had damage right under his lower lip --
- 13 A. Yes.
- 14 Q. -- is that correct?
- 15 A. The midline of the chin, yes.
- 16 Q. So, I understand your opinions, and I'm not going to argue
- 17 | with you. But as a general principal, if you get shot behind
- 18 | the right ear, it transects your brain, you're basically going
- 19 to drop like a sack of potatoes.
- 20 A. Yes. And I've said that, yes.
- 21 | Q. That could cause abrasion to the face, loosening of the
- 22 | teeth, and abrasions to the backs of the hands; is that
- 23 correct?
- 24 A. Yes.
- 25 Q. That's just common sense, isn't it?

11:13:39

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11:14:32

11:14:57

—Emma Lew - Cross-Examination -

- 1 A. Yes.
- 2 Q. On the other hand --
- Oh, by the way, did you know that yesterday Dr. Diaz
- 4 | Trejo testified that he could not discount the possibility that
- 5 | when the deceased was shot he received -- he may have received
- 6 head shot number 2, and then hit the wall with his face and his
- 7 arms?
- 8 Were aware that he testified to that?
- 9 A. No.
- 10 Q. And when I say "hit the wall," I mean with the left side of 11:14:10
- 11 his face.
- 12 Did you know that?
- 13 | A. No.
- 14 Q. I want to show you what's been marked --
- Well, let me just ask you this: You said on -- you
- 16 testified earlier that there was an abrasion on the left side
- 17 of the deceased's face, by his eye, that accounted for a stream
- 18 of blood that came down his face.
- 19 A. A trail of blood down his nose, across the left upper
- 20 eyelid.
- 21 | Q. But the abrasion wasn't bleeding in the picture.
- 22 A. He's dead.
- 23 Q. What?
- 24 A. He's dead.
- 25 Q. There's no blood exuding from the abrasion in the picture;

11:15:02

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11:16:23

-Emma Lew - Cross-Examination -

- 1 | is that right?
- 2 A. There's not a complete trail.
- I would be hard pressed to say where that blood came
- 4 from if it did not come from that abrasion. It did not come
- 5 | from the eye, it did not come from the nose, it did not come
- 6 from the forehead.
- 7 Q. Well, if it's bleeding, wouldn't you expect there to be a
- 8 | trail?
- 9 A. It's thin enough that it went over -- over the curvature of
- 10 the cheek.
 - 11 Q. Well, let me ask you this -- I mean, this isn't
 - 12 | really -- that isn't really a matter of expert opinion, it's
 - 13 just a question of looking at the photo and deciding for
 - 14 | yourself whether it's exuding blood or not; is that right?
 - 15 A. Yes.
 - 16 Q. When it comes to gunshot wound number 4, which injured the
 - 17 | thoracic vertebra, we can agree also -- and you've stated, that
 - 18 he would be able to -- he would have been able to control his
 - 19 upper extremities. And that, in fact, is why you're of the
 - 20 opinion that he was able to lift himself up off the ground
- 21 | after he was -- he fell to the ground; is that correct?
- 22 A. Yes.
- 23 | Q. But having the ability to control his upper extremities
- 24 also means that when he fell he would have been able to put his
- 25 | hands out to arrest his fall, and he wouldn't have had

11:16:39

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11:17:59

-Emma Lew - Cross-Examination

- 1 abrasions on the backs of his hands. Isn't that correct?
- 2 A. He had the ability to, but it happened so quickly I doubt
- 3 | if he had the time to think about it, to put his hands down.
- 4 Q. Isn't that just speculation on your part, it happened so
- 6 A. It did happen quickly.
- 7 Q. Physiologically, whatever happened, what you can tell us is
- 8 | that that injury did not cause him to lose control of his upper
- 9 extremities; is that true?
- 10 A. That is true.

quickly?

5

- 11 | Q. So not only -- and I understand what you're opinion is.
- 12 | But not only would he potentially have been able to put his
- 13 hands out to avoid the abrasions on the backs, he would have
- 14 | been able to keep his head off the ground to avoid abrading his
- 15 | face and loosening his front teeth. True?
- 16 A. Yes, that is true.
- 17 | Q. Unlike qunshot wound number 2 where he's -- there's no
- 18 | chance -- there's no chance he's going to be able to arrest his
- 19 fall in any fashion. If he's standing and gets that gunshot,
- 20 he's down.
- 21 A. Yes.
- 22 Q. True?
- 23 A. True.
- 24 | Q. Do you -- when you do autopsies, do you use styluses to
- 25 track wound trajectories?

11:18:26

11:18:44

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11:19:16

11:19:43

-Emma Lew - Cross-Examination -

- 1 A. I use them to show the direction of travel of the bullet.
- 2 | Q. Is that --
- 3 A. I guess that's a yes.
- 4 Q. Okay. Do you photograph the styluses in place so you can
- 5 | come back later and assess what the trajectory was if you need
- 6 to?
- 7 | A. I do.
- 8 Q. All right. Is that standard practice for you?
- 9 A. That is for me, yes.
- 10 Q. Is that standard practice in the industry?
- 11 A. For some people.
- 12 | Q. Were you aware that there was testimony yesterday that many
- or most of the bullet wounds in this case were tracked with
- 14 trajectories and photographed?
- 15 A. I was not aware that photographs were taken.
- 16 | Q. If you had had the opportunity to see photographs from the
- 17 | autopsy, with the styluses in place demonstrating the wound
- 18 | trajectories, would that have elevated your confidence in
- 19 | whatever opinions you expressed?
- 20 A. That could, yes.
- 21 | Q. It could turn out to be incredibly helpful.
- 22 A. It could.
- 23 | Q. Especially in a dynamic shooting event where there's no
- 24 | question that there's a lot of movement of the deceased before
- 25 he goes to the ground. Is that true?

11:20:00

11:20:24

11:20:31

11:20:39

-Emma Lew - Cross-Examination -

- 1 A. Yes.
- 2 Q. And, in fact, I think you testified that a couple of the
- 3 | bullets just couldn't be accounted for in terms of the autopsy,
- 4 | where they went, how they arrived there.
- 5 MS. FELDMEIER: She never testified to that,
- 6 Your Honor. Misstating the facts.
- 7 THE COURT: Overruled.
- 8 MR. CHAPMAN: I apologize. If I did, I apologize.
- 9 BY MR. CHAPMAN:
- 10 | Q. Tell me what -- you know what I'm getting at, I remember
- 11 your testimony.
- 12 A. I do.
- 13 Q. So tell me what --
- 14 A. Yes. The autopsy report could not account for the
- 15 remainder of the pathway of some bullets.
- 16 | Q. And what does that mean to a layman like me?
- 17 | A. It means that the track of some bullets was not followed
- 18 | all the way through the body, either to the bullet or to an
- 19 exit wound.
- 20 | Q. Meaning that if a stylus had been placed in the wound track | 11:20:57
- 21 | and photographed, that would have been incredibly helpful for
- 22 | anyone trying to assess the wound trajectories; is that true?
- 23 A. That could be helpful, provided you have the right wound
- 24 track.
- 25 Q. Your opinions based on the bullet trajectories are based on 11:21:18

11:21:41

11:22:12

11:22:24

11:22:33

-Emma Lew - Cross-Examination -

- 1 | your review of the autopsy photos in the Mexican autopsy
- 2 | report; is that true?
- 3 | A. Yes.
- 4 Q. But -- this is -- strike that.
- 5 One of the things that was incorporated into your
- 6 report was that Dr. Madrigal said that there was 1,000 to
- 7 | 1500 ccs of fluid in the thoracic cavity; is that correct?
- 8 A. Blood, yes.
- 9 Q. Okay. When you do an autopsy, do you actually measure the
- 10 | fluid, or do you just estimate?
- 11 A. I measure the blood.
- 12 | Q. How do you do that? Do you take it out of the body and put
- 13 | it in a container?
- 14 A. Yes, a graduated cylinder which has markings for the
- 15 quantities of blood.
- 16 Q. Okay.
- 17 A. Or whatever I'm measuring.
- 18 Q. Were you aware that Dr. Madrigal did not do that, he just
- 19 | gave an estimate?
- 20 A. Yes.
- 21 | Q. Were you also aware that yesterday he testified that he
- 22 | thought 3,000 ccs were -- of fluid were in the chest cavity or
- 23 thoracic cavity?
- 24 A. Yes, I heard that. I heard about that.
- 25 Q. You also indicated in your autopsy report -- your report, I 11:22:49

-Emma Lew - Cross-Examination -

- 1 | apologize -- that you reviewed Tom Bevel's report; is that
- 2 | correct?
- 3 A. Yes.
- 4 | Q. And he's a blood spatter expert?
- 5 | A. Yes.

- 11:23:14
- 6 Q. Did you have an opportunity to review the defense's blood
- 7 | spatter expert report prepared by Stuart James?
- 8 A. If it is listed, then I reviewed it.
- 9 Q. Well, it's not in your report. You haven't listed it;
- 10 right?

11:23:35

11:23:50

11:24:12

- 11 A. I do not believe so.
- 12 | Q. All right. I don't want to misstate your testimony, a lot
- 13 of it was technical and I may get it wrong, so I'm just going
- 14 to tell you that my impression from your testimony earlier
- 15 | today was that you found no damage to the ascending aorta; is
- 16 | that true?
- 17 A. Can you repeat the question, please?
- 18 | Q. You said that when you examined the photographs of the
- 19 autopsy you found no damage to the ascending aorta.
- 20 A. That part of the aorta was not visible in the photograph.
- 21 | However, there is a definite gunshot wound in the pericardial
- 22 | sac in the location that would be directly over the ascending
- 23 aorta.
- 24 Q. So do you have an opinion as to whether the ascending aorta
- 25 | was damaged or not?

11:24:31

-Emma Lew - Cross-Examination-

- 1 A. Based on that, and based on what Dr. Madrigal and Dr. Diaz
- 2 | said, I believe there was damage to the aorta.
- 3 Q. The ascending -- I don't know these technical terms, but
- 4 does that mean the ascending aorta?
- 5 | A. Yes.

11:24:45

11:25:53

11:26:13

11:26:40

- 6 Q. Okay. This morning you testified that there was damage to
- 7 | the brain stem. Is that in your report?
- 8 A. No. What's in my report was the result of my interview
- 9 | with Dr. Madrigal and Dr. Diaz in August of 2017. And as I
- 10 | said this morning, there may have been a miscommunication that
- 11 | the brain stem was transected by the bullet.
- 12 | Q. Okay. And that was because they cut it during the autopsy?
- 13 Is that what the miscommunication was?
- 14 A. Correct.
- 15 | Q. Okay. So you're not testifying that there was damage to
- 16 | the brain stem as a result of a bullet injury?
- 17 A. No, I am testifying there was damage to the right side of
- 18 | the brain stem, to which Dr. Madrigal agreed.
- 19 Q. You testified earlier -- you were shown a photograph of the
- 20 deceased on the ground that showed bullet wounds number 6, 7
- 21 | and 8, which were on the lower part of his back. And you
- 22 | couldn't see blood coming through the shirt for those wounds,
- 23 | but you could through the upper two wounds, number 4, and I
- 24 | can't remember the other one. But higher up on his back.
- 25 A. Yes, number 5 on the left.

11:27:03

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11:27:53

11:28:18

11:28:36

-Emma Lew - Cross-Examination -

- 1 Q. And you testified something about how, even though there's
- 2 | no blood coming from 6, 7 and 8 on the shirt, that he was still
- 3 | alive. Can you explain that again?
- 4 A. I believe that he was already down on the ground, on his
- 5 | front. And if he was shot at that time, blood would not

6 | necessarily be coming up. And it would be -- the blood would

7 be draining down into the tissues and the body cavities.

Plus, that part of the lower back would not be moving
as much as the upper back, where you do see the blood around

10 | the gunshot wounds -- over the gunshot wounds.

11 Q. The point I'm trying to make is that you're saying that

12 | three wounds on his back, where there's no blood, you believe

13 he's still alive when he received those wounds. And two that

14 | were exuding blood you believe he's still alive.

Is that essentially what you're saying?

- A. He was alive for probably all those shots.
- 17 Q. All right. This distinction that you made, it's not in
- 18 | your report anywhere.

16

- 19 A. This discussion specifically, that he was alive?
- 20 | Q. That somehow he was alive -- no, your testimony that even
- 21 | though he isn't bleeding from 6, 7 and 8, he is from the upper
- 22 | wounds, and somehow there's an explanation for that with him
- 23 | moving or not being able to move. That's just not in your
- 24 report anywhere.
- 25 A. No. However, the evidence is anatomical in that number 5

11:28:58

11:29:20

11:29:36

11:29:52

11:30:05

-Emma Lew - Cross-Examination -

- 1 is one of those gunshot wounds where the bullet ended up in the
- 2 left upper arm, therefore, he was alive because his left upper
- 3 arm was up and reaching out, and then drawn back after that.
- Therefore, he was alive during gunshot wound number 5 on the 4
- Q. Okay. And I'm not trying to quibble with you, I'm just 6
- trying to understand. Because at the beginning of your 7
- testimony you told me what you reviewed, and you told me your 8
- 9 report was comprehensive. And that opinion that you just
- 10 expressed is nowhere in this report. Is that true?
- 11 A. What specific opinion are you referring -- are you talking
- about? 12

15

5

left upper back.

- Q. Where you distinguish between not having blood on the lower 13
- 14 three bullet wounds on his back, but having blood on the two
- upper ones.
- 16 A. No, I did not mention that in my report.
- 17 MR. CHAPMAN: It's not anywhere to be found.
- 18 May I have a moment, Judge?
- 19 THE COURT: You may.
- 20 (Discussion off the record between defense counsel.)
- BY MR. CHAPMAN: 2.1
- Was the gunshot wound number 4 fatal? 22 Q.
- 23 In time it would be fatal. Α.
- 24 Q. Even if there was immediate medical personnel there?
- 25 Α. I believe so.

11:30:36

-Emma Lew - Cross-Examination-

1 Ο. Was gunshot wound number 2 instantly fatal? 2 Within seconds to a couple of minutes, yes. 3 MR. CHAPMAN: All right. Thank you. I have nothing further. 4 THE COURT: Miss Feldmeier? 5 11:30:50 MS. FELDMEIER: No redirect, Your Honor. 6 7 THE COURT: If the jurors have any questions, please 8 place them in writing. (At sidebar on the record.) THE COURT: Is that your trying to get her to the 10 11:31:32 airport defense? 11 12 MR. CHAPMAN: What's the airport defense? THE COURT: She's trying to catch a 12:30 plane. 13 14 MS. FELDMEIER: 12:50. 15 THE COURT: In your opinion could the change of the 11:31:46 shooter's position account for the different trajectories? 16 17 Would movement of an arm cause a blood smear when the victim's arm was pulled back? 18 19 How accurate is toxicology result from dead to a live 20 body? 11:32:08 2.1 Someone's really on that kick. 22 How do you get the specimen from the dead body, like 23 urine samples? 24 From your review of the report and pictures, did you 25 ever entertain the theory that the body may have hit or scraped 11:32:23

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-Emma Lew - Jury Questions -
 1
     against the wall when falling? Why or why not?
 2
              How accurate is the process of estimating blood loss?
 3
              Could the washing of the body with the multiple
     penetration wounds present -- excuse me, present -- let me say
 4
     it again.
 5
                                                                        11:32:50
              Could the washing of the body with the multiple
 6
 7
     penetration wounds present have allowed water to enter the
 8
     thoracic cavity?
              Is the exact extent of damage to the victim's brain or
10
     brain stem known?
                                                                        11:33:08
11
              Could the movement of the victim's left arm been
12
     caused by reflexes known to occur with brain or brain stem
13
     injuries?
14
              Can you explain why the victim's feet appear to be
15
     turned inward?
                                                                        11:33:24
16
              Was there any facial fracture identified on the left
     side of the face that may have occurred from the impact of the
17
18
     fall?
19
              All right. I'll ask all of those.
20
         (End of discussion at sidebar.)
                                                                        11:33:38
2.1
              THE COURT: Doctor, the jurors have several questions
22
     I'm going to ask on their behalf.
23
              In you're opinion could the change of the shooter's
24
     position account for the different trajectories?
25
              THE WITNESS: I imagine you're asking about the two
                                                                        11:34:05
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11:35:03

11:35:20

11:35:42

-Emma Lew - Jury Questions -

1 gunshot wounds on the right side of the back and the two on the 2 left side of the back. 3 It could. However, I do not believe so, because the two on the left side of the back went up into the left upper 4 There was still movement of the left upper -- of the left | 11:34:27 5 upper extremity, because initially it is consistent with him 6 7 falling on the backs of his hands, but the left upper arm would 8 have to be up in order to get the exit wound and the projectile 9 from the two qunshot wounds on the left side of the back. 10 the arm is withdrawn, as you see in the terminal position at 11:34:48 11 the scene -- in the scene photographs. 12 I don't know if that answers your question.

THE COURT: Would movement of an arm cause a blood smear when the victim's arm was pulled back?

THE WITNESS: It could.

13

14

15

16

17

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19

20

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22

23

24

25

THE COURT: How accurate is toxicology result from a dead to a live body?

THE WITNESS: In most cases it is very close. And we -- it is very close.

Now, with time, if there is no preservative, certain things can degrade and be lost. For example, alcohol in a sample may degrade with time unless there's preservative in the tube in which you put the specimen.

On the other hand, depending on what happens with the body, if there's any decomposition, the bacteria in the body

11:36:01

11:36:21

11:36:39

11:36:52

-Emma Lew - Jury Questions -

1 can also produce alcohol.

Cocaine, heroin, other substances, we are fairly confident in detecting, and we are fairly confident — depending on the laboratory used and their instruments and techniques, essentially the substances in the blood are pretty close, depending on what you — substance you're talking about, to that in the living person.

THE COURT: How do you get a specimen from a dead body like a urine sample?

THE WITNESS: Very easy. The bladder is right behind the pubic bone in the pelvis. And I usually use a large bore needle syringe, and I put the needle in and withdraw the urine from the bladder.

The other way to do it is cut open the bladder and scoop out the urine.

THE COURT: During your review of the reports and pictures, did you ever entertain the theory that the body may have hit or scraped against the wall while falling? Why or why not.

THE WITNESS: It really never occurred to me, because in the scene photographs the body is lying straight. And it's on the sidewalk, in the middle of the sidewalk, one -- over a foot away from the wall. So I didn't even think of the possibility that he struck the wall first. I think he would have fallen differently and landed differently.

11:37:14

11:38:54

-Emma Lew - Jury Questions -

1 0. How accurate is the process of estimating blood loss? 2 It can be within the body cavities, because we measure the 3 amount of blood inside the body cavities. We don't measure the blood loss at the scene, and trailing into the gutters at the 4 scene. We just describe the amount of blood on the scene. 5 11:37:40 But inside the body, we can measure the amounts of 6 blood that are in the cavities, which is abnormal because the 7 8 blood should be inside your blood vessels in the heart, and not in the cavities of the body. 9 10 Q. Could the washing of the body with the multiple 11:37:56 11 penetrations wounds present -- let me rephrase it. Could the washing of a body with multiple penetration 12 wounds present have allowed water to enter the thoracic cavity? 13 14 A. It's more the opposite. When we clean bodies, blood can 15 gush out of body cavities if there's a wound there. 11:38:20 16 Maybe some water can get into the edges of the wound. 17 But generally it's the opposite, it's blood inside the body coming out rather than fluids from the outside getting in. 18 19 THE COURT: Was there any facial fractures identified 20 on the left side of the face that may have occurred from the 11:38:38 21 impact of the fall? 22 THE WITNESS: There was no fracture mentioned in the 23 autopsy report. 24 THE COURT: Is the exact extent of damage to the

victim's brain and/or brain stem known?

25

-Emma Lew - Jury Questions -

1 THE WITNESS: I'm sorry, Your Honor, can you repeat 2 that question? 3 THE COURT: Is the exact extent of the damage to the victim's brain and/or brain stem known? 4 THE WITNESS: From the autopsy report and from the 5 11:39:08 photographs, I see it is a devastating injury, very consistent 6 7 with many other gunshot wounds I've seen to the head, where the bullet starts on one side of the head, goes through the skull 8 on one side, through both sides of the brain, and through the 9 10 skull on this side, to end up under the scalp on the left. 11:39:27 11 THE COURT: Could the movement of the victim's left arm have been caused by reflexes known to occur with brain and 12 13 brain stem injuries? 14 THE WITNESS: Not this type of deliberate movement 15 with the arm is extended and brought back. Usually terminal or agonal movements are seizure-like movement with shaking and 16 17 tremoring, not deliberate movements like this. These are 18 complex movements which require some volition or voluntary 19 action. 20 THE COURT: Can you explain why the victim's feet 11:40:05 21 appear to be turned inward? 22 THE WITNESS: They were turned inward. It was 23 possibly because he became immediately paralyzed and just fell 24 at the time he received the gunshot wound to the spine. 25 THE COURT: Those are all the questions I have from 11:40:25

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-----Emma Lew - Jury Questions ----
 1
     the jurors.
 2
              Miss Feldmeier, any questions based upon the jurors'
 3
     questions?
 4
              MS. FELDMEIER: No, Your Honor.
 5
              THE COURT: Mr. Chapman?
                                                                         11:40:34
 6
              MR. CHAPMAN: No, Your Honor. Thank you.
 7
              THE COURT: All right. Thank you, Doctor.
 8
              THE WITNESS: Thank you.
              THE COURT: You may step down.
10
              And you're free to go.
                                                                         11:40:45
11
              THE WITNESS: Thank you, Your Honor.
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-CR-15-1723-TUC-RCC - April 5, 2018 -
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               I, CANDY L. POTTER, do hereby certify that I am duly
 7
     appointed and qualified to act as Official Court Reporter for
     the United States District Court for the District of Arizona.
 8
 9
               I FURTHER CERTIFY that the foregoing pages constitute
     a full, true, and accurate transcript of all of that portion of
10
11
     the proceedings contained herein, had in the above-entitled
12
     cause on the date specified therein, and that said transcript
     was prepared under my direction and control.
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               DATED at Phoenix, Arizona, this 5th day of April,
15
     2018.
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                                     s/Candy L. Potter_
                                     Candy L. Potter, RMR, CRR
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